

***Interview Summary***

1. A proposed amendment was submitted for applicant's consideration. Examiner suggested Applicant to amend claims as shown in the Examiner's Amendment below in order to place the application in condition for allowance.

***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
3. Authorization for this examiner's amendment was given in a telephone interview with the Applicant's Representative, William Pieprz (Reg. No. 33,630), on 8 February 2008.

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**IN THE SPECIFICATION**

Please substitute the following title for the present title of the application:

----TERMINAL APPARATUS, NETWORK SYSTEM AND COMMUNICATION  
METHOD INCLUDING OPENING OF RECEIVED DOCUMENT FILE -----

Please substitute the following abstract for the present abstract of the application:

### **ABSTRACT OF DISCLOSURE**

A terminal apparatus is configured to receive image data from a scanner. A controller receives, from the scanner, a control file including a file name, receives, from the scanner, a document file, the document file including image data scanned by the scanner, analyzes the file name included in the received control file to obtain the file type of the received document file, and determines whether the application program associated with the obtained file type is stored in a memory. The controller also searches the memory to determine the application program associated with the obtained file type from application programs stored in the memory, starts the application program associated with the obtained file type, when it is determined that the application program associated with the obtained file type is stored in the memory, and opens the received document file without user input, based upon the application program determined in the search.

### **IN THE CLAIMS**

Please replace all claims as shown below:

IN THE CLAIMS:

1-14. (Canceled)

15. (Currently Amended) A terminal apparatus configured to receive image data

Art Unit: 2144

from a scanner, the terminal apparatus comprising:

- an interface configured to be connected to the scanner via a network;

- a memory configured to store information indicating a plurality of file types and an application program associated with each of the plurality of the file types, each application program being configured to open a document file associated with at least one of the plurality of the file types; and

- a controller configured to:

  - receive, from the scanner, a control file including a file name;

  - receive, from the scanner, ~~[[a]]~~ the document file, the document file including image data scanned by the scanner;

  - analyze the file name included in the received control file to obtain the file type of the received document file;

  - determine whether the application program associated with the obtained file type is stored in the memory;

  - search the memory to determine the application program associated with the obtained file type from the application programs stored in the memory;

  - start the application program associated with the obtained file type, when it is determined that the application program associated with the obtained file type is stored in the memory; and

  - open the received document file without user input, based upon the application program determined in the search.

16. (Previously Presented) The terminal apparatus according to claim 15, wherein the controller receives, from the scanner, the control file and the document file, according to a Lpr/Lpd protocol.

17. (Previously Presented) The terminal apparatus according to claim 15, wherein the controller displays the image data included in the document file on a display of the terminal apparatus, in the form of thumbnail.

18. (Previously Presented) The terminal apparatus according to claim 15, wherein the memory stores a plurality of display states associated with the information indicating the plurality of the file types, and the controller displays the image data included in the document file on a display of the terminal apparatus, based on the display state associated with the obtained file type.

19. (Previously Presented) The terminal apparatus according to claim 18, wherein the display state comprises displaying the image data in the form of a thumbnail.

20. (Currently Amended) A network system, comprising:

a scanner configured to scan image data; and

a terminal apparatus configured to be connected to the scanner via a network, and to store, in a memory, information indicating a plurality of file types and an application program associated with each of the plurality of the file types, each application program being configured to open a document file associated with at least one of the plurality of the file types,

the terminal apparatus being further configured to:

receive, from the scanner, a control file including a file name;

receive, from the scanner, [[a]] the document file, the document file including image data scanned by the scanner;

analyze the file name included in the received control file to obtain the file type of the received document file;

determine whether the application program associated with the obtained file type is stored in the memory;

search the memory to determine the application program associated with the obtained file type from the stored application programs;

start the application program associated with the obtained file type, when it is determined that the application program associated with the obtained file type is stored in the memory ; and

open the received document file without user input, based upon the application program determined in the search.

21. (Currently Amended) A communication method for receiving image data scanned by a scanner, using a terminal apparatus connected to the scanner via a network, the terminal apparatus storing, in a memory, information indicating a plurality of file types and an application program associated with each of the plurality of the file types, each application program being configured to open a document file associated with at least one of the plurality of the file types, the communication method comprising:

receiving, from the scanner, a control file including a file name;

receiving, from the scanner, [[a]] document file, the document file including image data scanned by the scanner;

analyzing the file name included in the received control file to obtain the file type of the received document file; and

determining whether the application program associated with the obtained file type is stored in the memory;

searching the memory of the terminal apparatus to determine the application program associated with the obtained file type from the application programs stored in the memory;

starting the application program associated with the obtained file type, when it is determined that the application program associated with the obtained file type is stored in the memory; and

opening the received document file without user input, based upon the application program determined in the searching determined in the search.

22. (Previously Presented) The terminal apparatus according to claim 15, wherein the interface is configured to be connectable to each of a plurality of scanners via a network, and the controller is configured to receive, from one of the plurality of the scanners, a control file including a file name and to receive, from the one of the plurality of the scanners, a document file, the document file including image data scanned by the scanner.

23. (Previously Presented) The terminal apparatus according to claim 15, the controller being further configured to determine whether data received from the scanner

comprises a control file and a document file, and when the controller determines that the received data includes the control file and the document file, to search the memory.

24. (Previously Presented) The terminal apparatus according to claim 15, wherein the memory stores file extensions with associated application programs and associated display states, the control file received from the scanner including a file extension.

25. (Previously Presented) The terminal apparatus according to claim 24, the controller being configured to utilize the file extensions to search the memory for the associated application program.

26. (Previously Presented) The terminal apparatus according to claim 15, the controller being configured to determine which application program to start, based upon data stored in memory, without user input.

27. (Previously Presented) The terminal apparatus according to claim 20, the controller being further configured to determine whether data received from the scanner comprises a control file and a document file, and when the controller determines that the received data includes the control file and the document file, to search the memory.

28. (Previously Presented) The terminal apparatus according to claim 20, wherein the memory stores file extensions associated with application programs and with associated display states, the control file received from the scanner including a file extension.

29. (Previously Presented) The terminal apparatus according to claim 28, the controller being configured to utilize the file extensions to search the memory for the associated application program.

30. (Previously Presented) The terminal apparatus according to claim 20, the controller being configured to determine which application program to start, based upon data stored in memory, without user input.

31. (Previously Presented) The communication method according to claim 21, further comprising determining whether data received from the scanner comprises a control file and a document file, and when the received data is determined to include the control file and the document file, searching the memory.

32. (Previously Presented) The communication method according to claim 21, further comprising storing file extensions with associated application programs and with associated display states, the control file received from the scanner including a file extension.

33. (Previously Presented) The communication method according to claim 32, further comprising utilizing the file extensions to search the memory for the associated application program.

34. (Previously Presented) The communication method according to claim 21, further comprising determining which application program to start, based upon data stored in memory, without user input.

35. (Previously Presented) The terminal apparatus according to claim 15, wherein the controller closes the connection with the scanner without opening the



received document file, when it is determined that the application program associated with the obtained file type is not stored in the memory.

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***Allowable Subject Matter***

4. Claims 15-35 are allowed. The following is an examiner's statement of reasons for allowance: In interpreting the claims, in light of the specification and the authorized Examiner's Amendment 8 February 2008, the Examiner finds the claimed invention to be patentably distinct from the prior art of record.
5. In regards to statutory subject matter, the Examiner interprets the claim language of "a scanner" to be hardware as recited in the specification in ¶ 26 and as shown in figures 1 and 2.
6. **Shaffer et al. (6,785,867)** teaches a system and method for automatically loading an application program associated with an e-mail application attachment file upon reception of the e-mail. Alternatively, the application program may be loaded as soon as the e-mail message itself is opened, without waiting for the user to click on the attachment icon. In either case, the application program is loaded in a minimized state such that as soon as the user clicks on the attachment icon, the attachment application file may be run without waiting for the relatively lengthy time required to load the application program. Prior to loading the application program, responsive to receiving the e-mail message, the computer (102, 114) may examine system resources to

determine whether memory (208) usage is sufficient to allow for the opening of the application program (**Shaffer, abstract, figure 4, and corresponding text**).

7. **Shih (6,504,626)** teaches a scanner with an external keyboard. The scanner comprises a scanner housing, a control circuit installed in the scanner housing for controlling operations of the scanner, a scanning module installed in the scanner housing and connected to the control circuit for scanning a document and generating corresponding document image signals, a keyboard electrically connected to the control circuit for inputting various key signals, and a display panel installed on the surface of the scanner housing and connected to the control circuit for displaying signals transmitted from the control circuit. The control circuit controls the operations of the scanner according to the key signals inputted by a user through the keyboard, and displays the key signals or instruction messages on the display panel (**see Shih, abstract, figure 3, and corresponding text**).

8. However, the prior art of record fail to teach or suggest individually or in combination the claimed limitation, *opening the received document file without user input, based upon the application program determined in the searching determined in the search*, which correlates to ¶ 61 of the specification, "Whereby, the user just instructs the scanner 2 to specify the destination and to scan the document so that the link application is automatically decided and started up by PC3 as well as scanning of the document and transmission of the image file. Resultantly, when the user returns to the user's PC on the desk, image information is displayed on the display 36 and the user can view the document file immediately. Accordingly, after retuning to the user's

PC on the desk, the user does not have to carry out such operations that the link application is selected at user's own discretion and started up, the image file sent from the network scanner 2 is searched from the data storage 35 and the searched file is opened." See also ¶¶12, 13, and 70 for further explanation.

9. These limitations, in conjunction with the other limitations in the independent claims 15, 20, and 21, are not specifically disclosed or remotely suggested in the prior art of record. Therefore, claims 15-35 are allowed.

10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571) 272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/R. N. S./

Examiner, Art Unit 2141

2/11/2008

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2144